Please amend the above-identified patent application as follows:

In the Claims

Please amend Claims 1, 16, 17, 32, 44 and 52 as follows:

- 1. (Twice Amended) A method of immunizing a vertebrate against an infectious agent, said method comprising administering to a vertebrate a DNA transcription unit comprising DNA encoding an antigen of the infectious agent operatively linked to DNA which is a promoter region, wherein the DNA transcription unit is expressed in cells of the vertebrate, [thereby eliciting a humoral immune response, a cell-mediated immune response or both, against the antigen,] whereby the vertebrate is protected from disease caused by the infectious agent.
- 16. (Twice Amended) A method of immunizing a vertebrate against an infectious agent, said method comprising administering to a vertebrate one or more DNA transcription units, each comprising DNA encoding an antigen or antigens of the infectious agent operatively linked to DNA which is a promoter region, wherein the DNA transcription unit or units are expressed in cells of the vertebrate, [thereby eliciting a humoral immune response, a cell-mediated immune response or both, against the antigen or antigens,] whereby the vertebrate is protected from disease caused by the infectious agent.
- 17. (Twice Amended) A method of immunizing a vertebrate against an infectious agent, said method comprising administering to a mucosal surface of the vertebrate a DNA transcription unit comprising DNA encoding an antigen of the infectious agent operatively linked to

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DNA which is a promoter region, in a physiologically acceptable carrier, wherein the DNA transcription unit is expressed in cells of the vertebrate, [thereby eliciting a humoral immune response, a cell-mediated immune response, or both, against the antigen,] whereby the vertebrate is protected from disease caused by the infectious agent.

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32. (Twice Amended) A method of immunizing a vertebrate against an infectious agent, said method comprising administering parenterally to the vertebrate a DNA transcription unit comprising DNA encoding an antigen of the infectious agent operatively linked to DNA which is a promoter region, in a physiologically acceptable carrier, wherein the DNA transcription unit is expressed in cells of the vertebrate, [thereby eliciting a humoral immune response, a cell-mediated immune response, or both, against the antigen,] whereby the vertebrate is protected from disease caused by the infectious agent.

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44.

(Twice Amended) A method of immunizing a mammal against an immunodeficiency virus, said method comprising administering to the mammal a DNA transcription unit comprising DNA encoding an antigen of the immunodeficiency virus operatively linked to DNA which is a promoter region, in a physiologically acceptable carrier, wherein the DNA transcription unit is expressed in cells of the vertebrate, [thereby eliciting a humoral immune response, a cell-mediated immune response, or both, against the antigen,] whereby the mammal is protected from disease caused by the immunodeficiency virus.

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52. (Twice Amended) A method of immunizing a vertebrate against an influenza <u>virus</u>, said method comprising